# REAPPEARANCE OF RARE NEW ENGLAND MARINE ALGAE

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Sporadic occurrences of marine algae are often more puzzling to botanists than would have been the case had the plants belonged to the land flora. It is notably more difficult to picture comprehensively the distribution of marine species, to locate small isolated colonies and, from lack of detailed knowledge of the sea bottom to differentiate physiographic from climatic limitations of range, particularly if the plants are rare, or at least rarely reported. The writer, having rather intensively observed a considerable area about Woods Hole, Massachusetts for over twenty years, has seen a number of reappearances of forms but once, or seldom, reported previously. It seems improbable that the plants have been abundantly present during the intervening years but remained undetected; they may have persisted as scattered individuals vegetatively propagated, or they may have been reintroduced from outside the area.

The current season has provided two notable examples. On landing at Gay Head, Marthas Vineyard, on July 10th, 1940, the writer almost immediately noticed on the sand an alga not previously found by him, but recognized as *Platoma Bairdii* (Farlow) Kuckuck. With the help of his class, there collecting algae for study, he secured several specimens and returned a week later for more. Altogether, many score specimens were brought back and preserved. Farlow (1875, p. 372) described[1] the plant as *Nemastoma ? Bairdii* on one small tetrasporic piece, and it has not been found in America in the interval; the next significant report[2] is that of Kuckuck (1912, p. 189) who made the present combination after finding more ample material off Helgoland and studying the asexual and sexual material thoroughly. The writer has not noticed sexual plants in the new Gay Head material, but it is richly tetrasporiferous. Here, then, is a species but once seen, reported again in great abundance after nearly 70 years of probable absence from the type locality

[1] Farlow, W. G. 1875. List of the Marine Algae of the United States with notes of New or Imperfectly Known Species. Proc. American Acad. Arts and Sci., **10**(11): 351–380.

[2] Kuckuck, P. 1912. Über Platoma Bairdii (Farlow) Kuckuck. Wiss. Meeresuntersuch., N. F., Abt. Helgoland, **5**(3): 189–210.

in an area inspected annually (for more than two decades) by dredging and shore collecting.

On the same day the Platoma came to light, one of the party brought to the writer in the field a small brown specimen which was easily distinguished as *Tilopteris Mertensii* (J. E. Sm.) Kütz., which he[3] had found in dredging off the same shore in 1931 (Taylor in Lewis and Taylor 1933, p. 151). On the first occasion two or three small pieces were found; on this there were several good specimens, all sporangial as before. There were none to be had at the same place a week later. Both Platoma and Tilopteris were washed ashore, but their normal habitat is on rocks in relatively shallow water. No plants were secured in 1940 when dredging nearby. With them was another species, rare in the region, which appeared in some abundance, namely *Gloiosiphonia capillaris* (Huds.) Carm. This the writer has only found on one or two earlier occasions.

A few words regarding other plants recognized as recently new to the district, or rare, may be pertinent. The Phaeophycean *Acrothrix novae-angliae* Taylor, first seen in 1925 and described[4] in 1928 (Taylor 1928, p. 577) has persisted and become more common, particularly during the current season. In 1934 the writer found[5] the tropical *Sargassum fluitans* Børg. washed ashore on Nonamesset Island (Taylor 1937, p. 211). The better known *S. natans* (L.) J. Meyen has frequently been reported, probably blown out of its usual path in the current of the Gulf Stream. We may add to these as a rare visitor to the coast *S. Hystrix* var. *buxifolium* (Ch.) J. Ag., which the writer found on the south side of Nantucket Island on the 17th of July 1938, associated with both of the above mentioned species. Among Rhodophyceae *Trailiella intricata* (J. Ag.) Batt. (Drew and Hof in Lewis and Taylor 1928, p. 196) has not continued as abundant as it was about 1930, but from 1927 to the present has turned up each summer, sometimes rare but generally in moderate amount. *Asparagopsis hamifera* (Har.) Okam. has continued in the flora,

[3] Lewis, I. F. and Taylor, W. R. 1933. Notes from the Woods Hole Laboratory, 1932. Rhodora **35**: 147–154.

[4] Taylor, W. R. 1928. A Species of Acrothrix on the Massachusetts Coast. Amer. Jour. Bot., **15**: 577–583.

[5] Taylor, W. R. 1937. Marine Algae of the Northeastern Coast of North America. vii + 427 pp., 60 pl. Ann Arbor.

with less fluctuation (Taylor in Lewis and Taylor 1928, p. 197).[6] *Plumaria sericea* (Harv.) Rupr. (Taylor 1937, p. 330)[5] and *Phycodrys rubens* (Huds.) Batt. (Taylor 1937, p. 351)[5] have occasional seasons of relative frequency, but are generally very scarce. *Lomentaria orcadensis* (Harv.) Coll. (Taylor 1937, p. 309) was rarely reported, but for two or three years about 1931 it was very frequent in shallow water at several stations; it now has not been seen for some years. *Scinaia furcellata* (Turn.) Biv., considered not rare by Davis about 1911 at suitable places, is only found at rare intervals in small pieces. Among Myxophyceae *Brachytrichia Quoyii* (C. Ag.) Born. & Flah. also is sporadic, having been seen here three times in over twenty years, tending to return in the old localities.

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NYMPHAEA TETRAGONA IN SOMERSET COUNTY, MAINE.—While on Waterfowl Survey work for the Maine Department of Inland Fisheries and Game, the writer with Virgil S. Pratt found *Nymphaea tetragona* Georgi in three localities in Somerset County. Previous reports of this plant for the State are by Wayne E. Manning, who found it in Chase Brook at Portage Lake[1], and by Olof O. Nylander, who reported it at Salmon Brook Lake Bog in Perham[2] and in Mosquito Brook at Portage Lake.[3] These stations are all in Aroostook County.

In Attean Pond in the town of Attean near the mouth of Moose River the plant was found scattered over several acres of open water, associated with *Potamogeton natans* L. and *Polygonum natans* A. Eaton. The water was about four feet deep over a bottom of firm mud; it had a pH of 7.0. Specimens of this collection will be deposited in the herbarium of the University of Maine and in the herbarium of the New England Botanical Club. In addition scattered plants were found in Dennistown. These were in Branch Stream, which flows into Little Big Wood

[6] Lewis, I. F. and Taylor, W. R. 1928. Notes from the Woods Hole Laboratory, 1928. RHODORA, **30**: 193–198.

[1] Manning, RHODORA **38**: 375, 1936.

[2] Nylander, Contribution to Free Booters Club of Knowledge, Caribou, Maine, January, 1938.

[3] Nylander, Presque Isle Star-Herald, November 21, 1940.